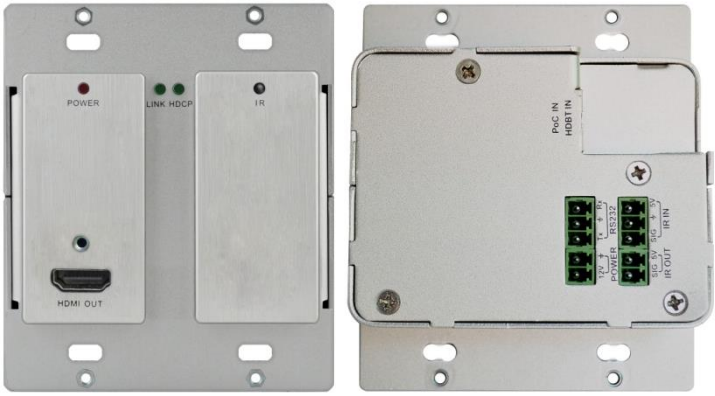
User Manual

MPTP-T70-WPR

HDBaseT Wall Plate Receiver



Version: MPTP-T70-WPR_2016V1.0

Preface

Read this user manual carefully before using this product. Pictures shown in this manual is for reference only, different model and specifications are subject to real product.

This manual is only for operation instruction only, not for any maintenance usage.

Trademarks

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.

SAFETY PRECAUTIONS

To insure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

Contents

1. Introduction

1.1 Introduction to MPTP-T70-WPR

MPTP-T70-WPR is a Decora style HDBaseT receiver that installs in a double-gang wall plate to provide a convenient interface for HDMI / DVI output. It has 1 HDMI OUT, 1 HDBT IN with PoC & PoE, 2 IR IN and 1 IR OUT. It supports HDMI 1.4& HDCP for reliable transmission. HDBT IN is capable to transmit AV& control signal up to 70m, of which IR& RS232 control signal can travel bi-directionally.

With its PoC/ PoE solution, MPTP-T70-WPR can be energized by far-end device whichever supports PoC/ PoE.

1.2 Features

- High bandwidth: 10.2Gbps
- Wide resolution range (from 480p to 4Kx2K)
- Compliant with HDMI 1.4, support 1080p 3D
- HDCP compliance, equipped with HDCP auto-tracking
- Bi-directional IR& RS232 control
- Powered by local power pack or power sourcing equipment via PoC/ PoE solution
- Aluminium design for elegant and better cooling

1.3 Package List

- 1 x MPTP-T70-WPR
- 2 x Screws
- 1 x Face Plate (2 gang)
- 2 x Screws (for face plate)
- 4 x Pluggable Terminal Blocks (2 2-pin block, 2 3-pin block)
- 1 x Power Adapter (DC 12V 1A, selectable)
- 1 x User Manual

Notes：Please confirm if the product and the accessories are all included, if not, please contact with the dealers.

2. Panel Description

2.1 Front Panel

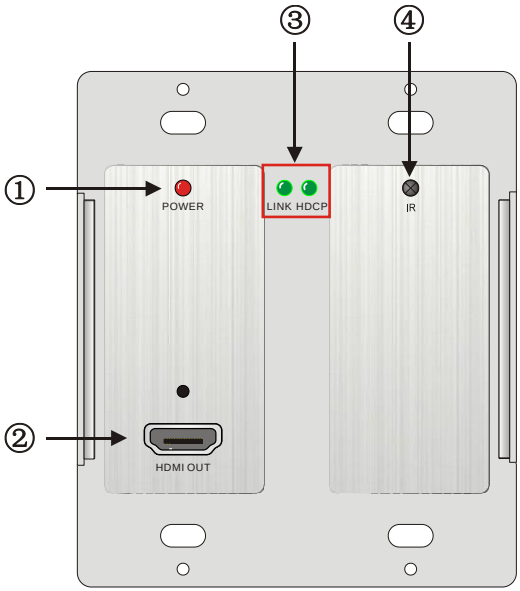


Figure 2- 1 Front panel of MPTP-T70-WPR

No.	Name	Description
①	Power indicator	Illuminates red when powered on
②	HDMI OUT	Connect with HDMI display
③	LINK &HDCP	✓ LINK: Twisted Pair Link status indicator, illuminate green when successfully connected. ✓ HDCP: HDCP compliance indicator, illuminate green when the source signals is with HDCP; blink when it is not with HDCP; and turn off when there is no source signal.
④	IR	In-built IR sensor.

2.2 Rear Panel

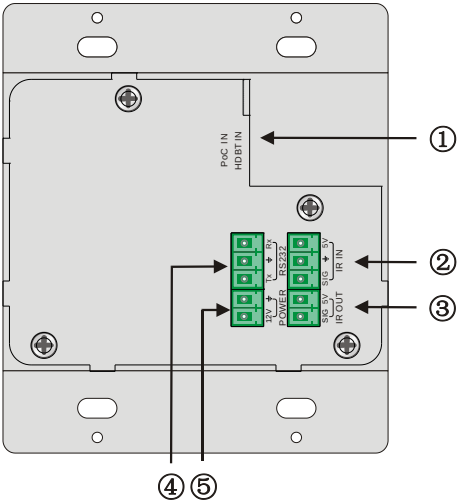


Figure 2- 2 Rear panel of MPTP-T70-WPR

No.	Name	Description
①	PoC IN& HDBT IN	RJ45 port, connect with transmitter via a CAT5e/6 cable to deliver AV& control signals, support PoC.
②	IR IN	Connect with IR receiver, receive IR signals sent from the IR Emitter connected to the far-end receiver.
③	IR OUT	Connect with IR Emitter, IR signals emitted from the IR emitter are received by the IR receiver connected to the far-end receiver.
④	RS232	Serial port, connects with a far-end receiver, supports bi-directional RS232 control (send control signal from local or receive control signal sent from far-end devices).
⑤	Power	Connect with DC 12V power adapter.

Note:

1. MPTP-T70-WPR can be energized via standard PoC& PoE, i.e. it can be energized by far-end device.
2. Once connecting an IR Receiver to the **IR IN** socket, both the in-built IR sensor and the extended IR Receiver is capable to collect IR signal.
3. Pictures shown in this manual are for reference only, different model and specifications are subject to real product.

3. System Connection

3.1 Usage Precautions

1) System should be installed in a clean environment and has a prop temperature and humidity.

2) All of the power switches, plugs, sockets and power cords should be insulated and safe.

3) All devices should be connected before power on.

3.2 System Diagram

The following diagram illustrates typical input and output connections that can be utilized with MPTP-T70-WPR (exampled by HDBaseT Twisted Pair PoC Transmitter):

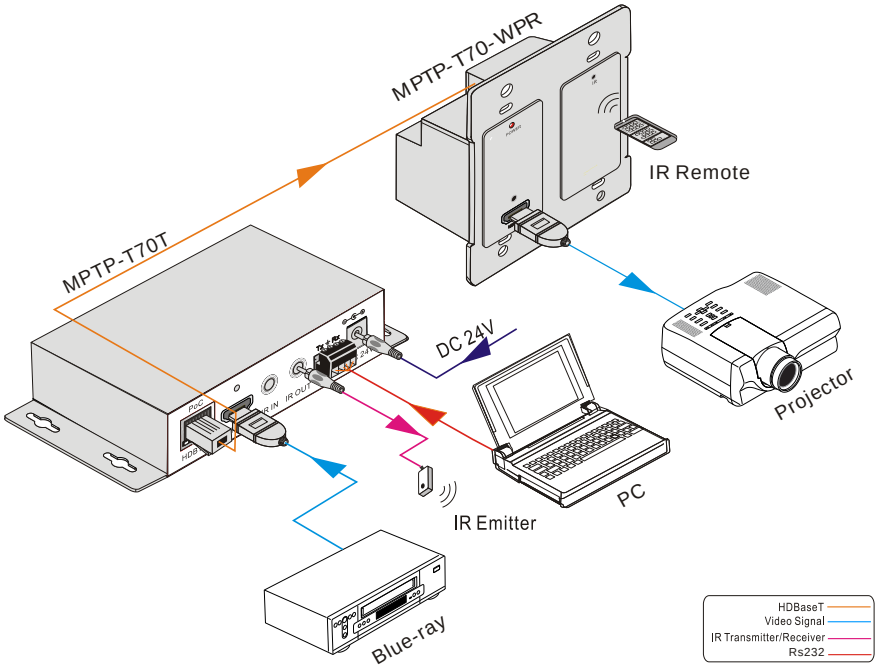


Figure 3- 1 System connection

3.3 Connection Procedure

Step1. Connect HDMI source device (e.g. Blue-ray DVD) to **HDMI IN** socket of the HDBaseT Twisted Pair PoC Transmitter with HDMI cable.

Step2. Connect the HDBT ports of HDBaseT Twisted Pair PoC Transmitter (such as MPTP-T70T) and MPTP-T70-WPR.

Step3. Connect a HDMI display to the **HDMI OUT** port of MPTP-T70-WPR.

Step4. Connect a control terminal (e.g. a PC) to the RS232 port of either HDBaseT Twisted Pair PoC Transmitter or MPTP-T70-WPR.

Step5. Both HDBaseT Twisted Pair PoC Transmitter and MPTP-T70-WPR have IR IN and IR OUT sockets. When one model is used for IR signal receiver, the IR signal must be sent out by the other model.

For example: When “IR IN” of MPTP-T70-WPR connects with an IR receiver, the IR emitter must connect to IR OUT of HDBaseT Twisted Pair PoC Transmitter.

Step6. Connect a DC 24V power adaptor to the power port of HDBaseT Twisted Pair PoC Transmitter.

Note: IR& RS232 signal can be transmitted bi-directionally between MPTP-T70-WPR and HDBaseT Twisted Pair PoC Transmitter.

3.4 PoC/ PoE Solution

Apart from power supply, MPTP-T70-WPR can be energized by far-end devices that support PoC/ PoE, which increases the system flexibility.

Connect the receiver and far-end device (exampled by HDBaseT Twisted Pair PoC Transmitter) via a CAT5e/6 cable as below:

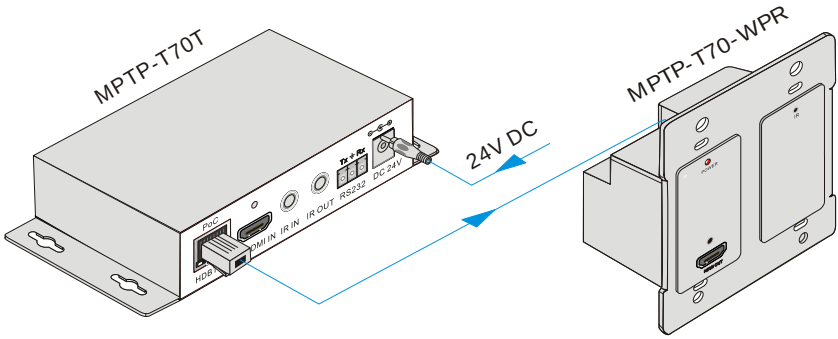


Figure 3- 2 PoC Solution

AV and IR& RS232 control signal can also be transmitted via the cable.

Note: MPTP-T70-WPR supports **unidirectional** PoC/ PoE, i.e, MPTP-T70-WPR can get power from far-end PoC/ PoE devices.

3.5 Application

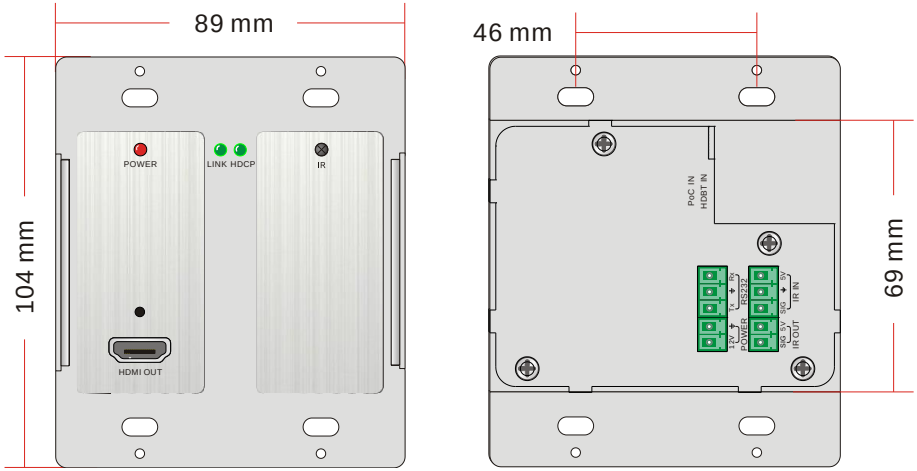
MPTP-T70-WPR has a good application in various occasions, such as computer realm, monitoring, conference room, big screen displaying, television education, command & control center and smart home etc.

4. Specification

Video			
Input	1 HDBT	Output	1 HDMI
Input Connector	1 RJ45	Output Connector	1 19-pin Type A HDMI female
Transmission Distance	1080P≤20M 4Kx2K≤15M		
Control Parts			
Control Ports	1 RS232 2 IR IN (1 in-built IR sensor on front panel, 1 3.5mm IR IN on rear panel 1 IR OUT		
General			
Resolution	HDMI:4Kx2K, 1080P 3D, 1080P, 1080i, 720P, 576P, 576i, 480P, 480i		
	DVI:1920x1200@60Hz, 1920x1080@60Hz, 1600x1200@60Hz, 1280x1024@75Hz, 1280x1024@60Hz, 1024x768@75Hz, 1024x768@70Hz, 1024x768@60Hz, 800x600@75Hz, 800x600@72Hz, 800x600@60Hz, 640x480@75Hz, 640x480@72Hz, 640x480@60Hz		
Transmission Distance	1080P≤70M (PoC) 4Kx2K≤40M (PoC)		
Bandwidth	10.2Gbps		
HDMI Standard	Support HDMI1.4 and HDCP		
Chassis Dimension	Decora style two gang		
Power Consumption	7w (Max)	Power Supply	DC 12V 1A
Temperature	0 ~ 55℃	Reference Humidity	10% ~ 90%
Dimension (W*H*D)	89x 104 x 35 mm	Weight	0.24Kg

Note: All nominal levels are at ±10%.

5. Panel Drawing



6. Troubleshooting & Maintenance

Problems	Causes	Solutions
Color losing or no video signal output in HDMI display	The connecting cables may not be connected correctly or it may be broken	Check whether the cables are connected correctly and in working condition.
No HDMI signal output in the device while local HDMI input is in normal working state		
Output image with snowflake		
POWER indicator doesn't work or no respond to any operation	Loose or failed power cord connection	Ensure the power cord connection is good
Cannot control the device by control device (e.g. a PC) through RS232 port	Wrong RS232 communication parameters	Make sure the RS232 communication parameters are correct.
	The unit is broken	Send it to authorized dealer for repairing.
Static becomes stronger when connecting the video connectors	bad grounding	Check the grounding and make sure it is connected well.

If your problem persists after following the above troubleshooting steps, seek further help from authorized dealer or our technical support.

7. After-sales Service

If there appear some problems when running MPTP-T70-WPR, please check and deal with the problems reference to this user manual. Any transport costs are borne by the users during the warranty.

1) **Product Limited Warranty:** We warrant that our products will be free from defects in materials and workmanship for **three years,** which starts from the first day you buy this product (The purchase invoice shall prevail).
   Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.
2) **What the warranty does not cover:**
   - Warranty expiration.
   - Factory applied serial number has been altered or removed from the product.
   - Damage, deterioration or malfunction caused by:
     - Normal wear and tear
     - Use of supplies or parts not meeting our specifications
     - No certificate or invoice as the proof of warranty.
     - The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
     - Damage caused by force majeure.
     - Servicing not authorized
     - Any other causes which does not relate to a product defect
   - Delivery, installation or labor charges for installation or setup of the product
3) **Technical Support:** Email to our after-sales department or make a call, please inform us the following information about your cases.
   - Product version and name.
   - Detailed failure situations.
   - The formation of the cases.

Remarks: For any questions or problems, please try to get help from your local distributor.